

Claims

What is claimed is:

1. A method of using speech for marking and subsequently identifying one or more items having electronically-readable identifiers respectively marked thereon, the method comprising the steps of:

inputting at least a portion of the electronically-readable identifier marked on an item;

inputting from a user a spoken utterance that corresponds to the item;

associating the electronically-readable identifier input from the item with the spoken utterance input from the user; and

outputting the spoken utterance when the electronically-readable identifier associated with the spoken utterance is subsequently inputted.

2. The method of claim 1, wherein the electronically-readable identifier marked on the item is a universal product code.

3. The method of claim 2, wherein the electronically-readable identifier inputting step comprises reading the universal product code from each item with a barcode reader.

4. The method of claim 3, wherein the associating step comprises storing the spoken utterance corresponding to each item using the universal product code read by the barcode reader for each item as an index.

5. The method of claim 4, wherein the outputting step comprises:
subsequently reading the universal product code from an item with the barcode reader;
searching stored spoken utterances using the universal product code as an index;
and

playing back the spoken utterance that is found in the search to the user.

6. The method of claim 1, further comprising the step of converting the spoken utterances input by the user to text and associating the electronically-readable identifier input from the item with the corresponding text.

5 7. The method of claim 6, wherein the step of converting the spoken utterance to text is performed by a speech recognition system.

8. The method of claim 6, further comprising the steps of converting the text back to speech when the electronically-readable identifier associated with the spoken utterance is subsequently inputted and then outputting the converted speech.

10 9. The method of claim 8, wherein the step of converting the text back to speech is performed by a text-to-speech system.

10. The method of claim 6, wherein the speech-to-text conversion is performed on a computing device remotely located with respect to a computing system performing the other steps.

15 11. The method of claim 10, wherein the computing device that performs the speech-to-text conversion archives electronically-readable identifiers and associated spoken utterances.

20 12. A system for using speech for marking and subsequently identifying one or more items having electronically-readable identifiers respectively marked thereon, the system comprising:

a first input device, the first input device being operative to input at least a portion of the electronically-readable identifier marked on an item;

a second input device, the second input device being operative to input a spoken utterance from a user that corresponds to the item;

5 a storage mechanism, the storage mechanism being operatively coupled to the first and second input devices and operative to associate the electronically-readable identifier input from the item with the spoken utterance input from the user; and

an output device, the output device being operatively coupled to the storage mechanism and operative to output the spoken utterance when the electronically-readable identifier associated with the spoken utterance is subsequently inputted.

10 13. The system of claim 12, wherein the electronically-readable identifier marked on the one or more items is a universal product code.

14. The system of claim 13, wherein the first input device is a barcode reader which reads the universal product code from each item.

15 15. The system of claim 14, wherein the storage mechanism is operative to store the spoken utterance corresponding to each item using the universal product code read by the barcode reader for each item as an index.

20 16. The system of claim 15, wherein the output device is operative to play back to the user the spoken utterance that is found during a search by the storage mechanism using a universal product code as an index when the universal product code is subsequently read from an item by the barcode reader.

17. The system of claim 12, further comprising a speech recognition system operatively coupled between the second input device and the storage mechanism and

operative to convert the spoken utterances input by the user to text such that the electronically-readable identifier input from the item is associated with the corresponding text.

5 18. The system of claim 17, further comprising a text-to-speech system operatively coupled between the storage mechanism and the output device and operative to convert the text back to speech when the electronically-readable identifier associated with the spoken utterance is subsequently re-inputted and to then output the converted speech.

10 19. The system of claim 12, further comprising a speech recognition system, remotely located with respect to the system, for converting the spoken utterances input by the user to text.

20. The system of claim 12, further comprising a computing device for remotely archiving the electronically-readable identifier/spoken utterance association.

15 21. Apparatus for using speech for marking and subsequently identifying one or more items having barcodes respectively marked thereon, the apparatus comprising:

a barcode reader, the barcode reader being operative to input at least a portion of a barcode marked on an item;

a speech capturing device, the speech capturing device being operative to input a spoken utterance from a user that corresponds to an item;

20 at least one processor, the processor being operatively coupled to the barcode reader and the speech capturing device and operative to: (i) associate in a database the barcode read from the item with the spoken utterance input from the user; and (ii) search the database for the spoken utterance when the barcode associated with the spoken utterance is subsequently read by the barcode reader; and

a speech outputting device, the speech outputting device being operatively coupled to the processor and operative to output the spoken utterance found during the search.

5 22. The apparatus of claim 21, wherein the processor is further operative to convert the spoken utterances input by the user to text such that the barcode read from the item is associated with the corresponding text.

10 23. The apparatus of claim 22, wherein the processor is further operative to convert the text back to speech when the barcode associated with the spoken utterance is subsequently read such that the converted speech is output by the speech outputting device.

24. The apparatus of claim 21, wherein the apparatus is configured to be user-portable.

15 25. An article of manufacture for using speech for marking and subsequently identifying one or more items having electronically-readable identifiers respectively marked thereon, comprising a machine readable medium containing one or more programs which when executed implement the steps of:

inputting at least a portion of the electronically-readable identifier marked on an item;

inputting from a user a spoken utterance that corresponds to the item;

20 associating the electronically-readable identifier input from the item with the spoken utterance input from the user; and

outputting the spoken utterance when the electronically-readable identifier associated with the spoken utterance is subsequently inputted.